

SEQUENCE LISTING

<110> Alnemri, Emad S.
Fernandez-Alnemri, Teresa

<120> CASPASE-14, AN APOTOTIC PROTEASE, NUCLEIC ACID ENCODING
AND METHODS OF USE

<130> 480140.434C1

<140> US 09/187,789

<141> 1998-11-06

<160> 78

<170> PatentIn Ver. 2.0

<210> 1

<211> 850

<212> DNA

<213> Mus musculus

<220>

<221> modified_base

<222> (537)

<223> Where n is Adenine, Cytosine, Guanine or Thymine

<400> 1

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atggagtcag agatgagtgga tcctcagcca ttgcaggagg aaagatatga tatgtcaggt 120
gcccgcctgg ccttgacgct gtgtgtcacc aaagcccggg agggttccga ggtagacatg 180
gaggccctgg aacgcatggt ccgttacctg aaatttgaaa gcaccatgaa gagggatccc 240
accgcccagc aatttctgga agagttggat gaatttcagc agaccataga taattgggaa 300
gagcctgtca gctgtgcctt tgtggtactc atggcacatg gtgaggaagg ctcctcaag 360
ggagaagatg agaagatggt cagactagaa gaccttttg aagtcttgaa caacaagaac 420
tgcaaggccc tgagaggcaa gccaaaaggc tacatcatcc aggctttag aggagagcac 480
agagaccccg gtgaggaact acgtggaaat gaggaactag gtggagatga ggaactnggt 540
ggagatgagg ttgctgtgct caagaacaac ccccaaagta tcccaaccta tacggatacc 600
ctccacatct actccacggt agagggttac ctctcctata gacatgacga gaaaggctct 660
ggcttcatcc agaccctgac ggatgtgttc attcataaaa aaggatccat cttagaactg 720
acagaagaga tcacccgact tatggcaaac acggagggtg tgcaggaagg aaaaccaagg 780
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<210> 2

<211> 260

<212> PRT

<213> Mus musculus

<400> 2

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15                      20                      25
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"FOOT" E0668560

Thr Lys Ala Arg Glu Gly Ser Glu Val Asp Met Glu Ala Leu Glu Arg
 30 35 40 45
 Met Phe Arg Tyr Leu Lys Phe Glu Ser Thr Met Lys Arg Asp Pro Thr
 50 55 60
 Ala Gln Gln Phe Leu Glu Glu Leu Asp Glu Phe Gln Gln Thr Ile Asp
 65 70 75
 Asn Trp Glu Glu Pro Val Ser Cys Ala Phe Val Val Leu Met Ala His
 80 85 90
 Gly Glu Glu Gly Leu Leu Lys Gly Glu Asp Glu Lys Met Val Arg Leu
 95 100 105
 Glu Asp Leu Phe Glu Val Leu Asn Asn Lys Asn Cys Lys Ala Leu Arg
 110 115 120 125
 Gly Lys Pro Lys Val Tyr Ile Ile Gln Ala Cys Arg Gly Glu His Arg
 130 135 140
 Asp Pro Gly Glu Glu Leu Arg Gly Asn Glu Glu Leu Gly Gly Asp Glu
 145 150 155
 Glu Leu Gly Gly Asp Glu Val Ala Val Leu Lys Asn Asn Pro Gln Ser
 160 165 170
 Ile Pro Thr Tyr Thr Asp Thr Leu His Ile Tyr Ser Thr Val Glu Gly
 175 180 185
 Tyr Leu Ser Tyr Arg His Asp Glu Lys Gly Ser Gly Phe Ile Gln Thr
 190 195 200 205
 Leu Thr Asp Val Phe Ile His Lys Lys Gly Ser Ile Leu Glu Leu Thr
 210 215 220
 Glu Glu Ile Thr Arg Leu Met Ala Asn Thr Glu Val Met Gln Glu Gly
 225 230 235
 Lys Pro Arg Lys Val Asn Pro Glu Val Gln Ser Thr Leu Arg Lys Lys
 240 245 250
 Leu Tyr Leu Gln
 255
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 <212> PRT
 <213> Mus musculus
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 Gln Ala Cys Arg Gly
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"COAT" E066660

<210> 4
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 <212> DNA
 <213> Homo sapien

<220>
 <221> CDS
 <222> (49)...(774)

<400> 4
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 Pro Arg Ser Leu Glu Glu Lys Tyr Asp Met Ser Gly Ala Ala Leu
 5 10 15

gcc cta ata ctg tgt gtc acc aaa gcc cgg gaa ggt tcc gaa gaa gac 153
 Ala Leu Ile Leu Cys Val Thr Lys Ala Arg Glu Gly Ser Glu Glu Asp
 20 25 30 35

ctg gat gct ctg gaa cac atg ttt cgg cag ctg aga ttc gaa agc acc 201
 Leu Asp Ala Leu Glu His Met Phe Arg Gln Leu Arg Phe Glu Ser Thr
 40 45 50

atg aaa aga gac ccc act gcc gag caa ttc cag gaa gag ctg gaa aaa 249
 Met Lys Arg Asp Pro Thr Ala Glu Gln Phe Gln Glu Glu Leu Glu Lys
 55 60 65

ttc cag cag gcc atc gat tcc cgg gaa gat ccc gtc agt tgt gcc ttc 297
 Phe Gln Gln Ala Ile Asp Ser Arg Glu Asp Pro Val Ser Cys Ala Phe
 70 75 80

gtg gta ctc atg gct cac ggg agg gaa ggc ttc ctc aag gga gaa gat 345
 Val Val Leu Met Ala His Gly Arg Glu Gly Phe Leu Lys Gly Glu Asp
 85 90 95

ggg gag atg gtc aag ctg gag aat ctc ttc gag gcc ctg aac aac aag 393
 Gly Glu Met Val Lys Leu Glu Asn Leu Phe Glu Ala Leu Asn Asn Lys
 100 105 110 115

aac tgc cag gcc ctg cga gct aag ccc aag gtg tac atc ata cag gcc 441
 Asn Cys Gln Ala Leu Arg Ala Lys Pro Lys Val Tyr Ile Ile Gln Ala
 120 125 130

tgt cga gga gaa caa agg gac ccc ggt gaa aca gta ggt gga gat gag 489
 Cys Arg Gly Glu Gln Arg Asp Pro Gly Glu Thr Val Gly Gly Asp Glu
 135 140 145

att gtg atg gtc atc aaa gac agc cca caa acc atc cca aca tac aca 537
 Ile Val Met Val Ile Lys Asp Ser Pro Gln Thr Ile Pro Thr Tyr Thr
 150 155 160

FOOT "E068860

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<211> 242																
<212> PRT																
<213> Homo sapien																
<400> 5																
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Ala	Ala	Leu	Ala	Leu	Ile	Leu	Cys	Val	Thr	Lys	Ala	Arg	Glu	Gly	Ser	
			20					25					30			
Glu	Glu	Asp	Leu	Asp	Ala	Leu	Glu	His	Met	Phe	Arg	Gln	Leu	Arg	Phe	
		35					40					45				
Glu	Ser	Thr	Met	Lys	Arg	Asp	Pro	Thr	Ala	Glu	Gln	Phe	Gln	Glu	Glu	
		50				55					60					
Leu	Glu	Lys	Phe	Gln	Gln	Ala	Ile	Asp	Ser	Arg	Glu	Asp	Pro	Val	Ser	
65					70					75					80	
Cys	Ala	Phe	Val	Val	Leu	Met	Ala	His	Gly	Arg	Glu	Gly	Phe	Leu	Lys	
				85						90				95		
Gly	Glu	Asp	Gly	Glu	Met	Val	Lys	Leu	Glu	Asn	Leu	Phe	Glu	Ala	Leu	
			100					105					110			
Asn	Asn	Lys	Asn	Cys	Gln	Ala	Leu	Arg	Ala	Lys	Pro	Lys	Val	Tyr	Ile	
		115					120					125				
Ile	Gln	Ala	Cys	Arg	Gly	Glu	Gln	Arg	Asp	Pro	Gly	Glu	Thr	Val	Gly	
	130					135					140					
Gly	Asp	Glu	Ile	Val	Met	Val	Ile	Lys	Asp	Ser	Pro	Gln	Thr	Ile	Pro	
145					150					155					160	
Thr	Tyr	Thr	Asp	Ala	Leu	His	Val	Tyr	Ser	Thr	Val	Glu	Gly	Tyr	Ile	
				165						170					175	
Ala	Tyr	Arg	His	Asp	Gln	Lys	Gly	Ser	Cys	Phe	Ile	Gln	Thr	Leu	Val	
			180					185					190			
Asp	Val	Phe	Thr	Lys	Arg	Lys	Gly	His	Ile	Leu	Glu	Leu	Leu	Thr	Glu	
		195					200					205				
Val	Thr	Arg	Arg	Met	Ala	Glu	Ala	Glu	Leu	Val	Gln	Glu	Gly	Lys	Ala	

tgt cga gga gaa caa agg gac ccc ggt gaa aca gta ggt gga gat gag 48
Cys Arg Gly Glu Gln Arg Asp Pro Gly Glu Thr Val Gly Gly Asp Glu
135 140 145

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<210> 7
<211> 230
<212> PRT
<213> Homo sapien
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<400> 7															
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Ala	Arg	Leu	Ala	Leu	Ile	Leu	Cys	Val	Thr	Lys	Ala	Arg	Glu	Gly	Ser
		20						25					30		
Glu	Glu	Asp	Leu	Asp	Ala	Leu	Glu	His	Met	Phe	Arg	Gln	Leu	Arg	Phe
		35					40					45			
Glu	Ser	Thr	Met	Lys	Arg	Asp	Pro	Thr	Ala	Glu	Gln	Phe	Gln	Glu	Glu
	50					55					60				
Leu	Glu	Lys	Phe	Gln	Gln	Ala	Ile	Asp	Ser	Arg	Glu	Asp	Pro	Val	Ser
65				70						75				80	
Cys	Ala	Phe	Val	Val	Leu	Met	Ala	His	Gly	Arg	Glu	Gly	Phe	Leu	Lys
			85						90					95	
Gly	Glu	Asp	Gly	Glu	Met	Val	Lys	Leu	Glu	Asn	Leu	Phe	Glu	Ala	Leu
			100					105					110		
Asn	Asn	Lys	Asn	Cys	Gln	Ala	Leu	Arg	Ala	Lys	Pro	Lys	Val	Tyr	Ile
		115					120					125			
Ile	Gln	Ala	Cys	Arg	Gly	Glu	Gln	Arg	Asp	Pro	Gly	Glu	Thr	Val	Gly
	130				135						140				
Gly	Asp	Glu	Ile	Val	Met	Val	Ile	Lys	Asp	Ser	Pro	Gln	Thr	Ile	Pro
145				150						155				160	
Thr	Tyr	Thr	Asp	Ala	Leu	His	Val	Tyr	Ser	Thr	Val	Glu	Gly	Pro	Thr

165 170 175
 Pro Phe Gln Asp Pro Leu Tyr Leu Pro Ser Glu Ala Pro Pro Asn Pro
 180 185 190
 Pro Leu Trp Asn Ser Gln Asp Thr Ser Pro Thr Asp Met Ile Arg Lys
 195 200 205
 Ala His Ala Leu Ser Arg Pro Trp Trp Met Cys Ser Arg Arg Gly Lys
 210 215 220
 Asp Ile Ser Trp Asn Phe
 225 230

<210> 8
 <211> 693
 <212> DNA
 <213> Homo sapien

<220>
 <221> CDS
 <222> (49)...(690)

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 Met Ser Asn
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 Pro Arg Ser Leu Glu Glu Glu Lys Tyr Asp Met Ser Gly Ala Arg Leu
 5 10 15

 gcc cta ata ctg tgt gtc acc aaa gcc cgg gaa ggt tcc gaa gaa gaa 153
 Ala Leu Ile Leu Cys Val Thr Lys Ala Arg Glu Gly Ser Glu Glu Glu
 20 25 30 35

 gag ctg gaa aaa ttc cag cag gcc atc gat tcc cgg gaa gat ccc gtc 201
 Glu Leu Glu Lys Phe Gln Gln Ala Ile Asp Ser Arg Glu Asp Pro Val
 40 45 50

 agt tgt gcc ttc gtg gta ctc atg gct cac ggg agg gaa ggc ttc ctc 249
 Ser Cys Ala Phe Val Val Leu Met Ala His Gly Arg Glu Gly Phe Leu
 55 60 65

 aag gga gaa gat ggg gag atg gtc aag ctg gag aat ctc ttc gag gcc 297
 Lys Gly Glu Asp Gly Glu Met Val Lys Leu Glu Asn Leu Phe Glu Ala
 70 75 80

 ctg aac aac aag aac tgc cag gcc ctg cga gct aag ccc aag gtg tac 345
 Leu Asn Asn Lys Asn Cys Gln Ala Leu Arg Ala Lys Pro Lys Val Tyr
 85 90 95

 atc ata cag gcc tgt cga gga gaa caa agg gac ccc ggt gaa aca gta 393
 Ile Ile Gln Ala Cys Arg Gly Glu Gln Arg Asp Pro Gly Glu Thr Val
 100 105 110 115

 ggt gga gat gag att gtg atg gtc atc aaa gac agc cca caa acc atc 441
 Gly Gly Asp Glu Ile Val Met Val Ile Lys Asp Ser Pro Gln Thr Ile
 120 125 130

FOOZT "E0668650

cca aca tac aca gat gcc ttg cac gtt tat tcc acg gta gag gga tac 489
 Pro Thr Tyr Thr Asp Ala Leu His Val Tyr Ser Thr Val Glu Gly Tyr
 135 140 145

atc gcc tac cga cat gat cag aaa ggc tca tgc ttt atc cag acc ctg 537
 Ile Ala Tyr Arg His Asp Gln Lys Gly Ser Cys Phe Ile Gln Thr Leu
 150 155 160

gtg gat gtg ttc acg aag agg aaa gga cat atc ttg gaa ctt ctg aca 585
 Val Asp Val Phe Thr Lys Arg Lys Gly His Ile Leu Glu Leu Leu Thr
 165 170 175

gag gtg acc cgg cgg atg gca gaa gca gag ctg gtt caa gaa gga aaa 633
 Glu Val Thr Arg Arg Met Ala Glu Ala Glu Leu Val Gln Glu Gly Lys
 180 185 190 195

gca agg aaa acg aac cct gaa atc caa agc acc ctc cgg aaa cgg ctg 681
 Ala Arg Lys Thr Asn Pro Glu Ile Gln Ser Thr Leu Arg Lys Arg Leu
 200 205 210

tat ctg cag tag 693
 Tyr Leu Gln

<210> 9
 <211> 214
 <212> PRT
 <213> Homo sapien

<400> 9
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 20 25 30
 Glu Glu Glu Glu Leu Glu Lys Phe Gln Gln Ala Ile Asp Ser Arg Glu
 35 40 45
 Asp Pro Val Ser Cys Ala Phe Val Val Leu Met Ala His Gly Arg Glu
 50 55 60
 Gly Phe Leu Lys Gly Glu Asp Gly Glu Met Val Lys Leu Glu Asn Leu
 65 70 75 80
 Phe Glu Ala Leu Asn Asn Lys Asn Cys Gln Ala Leu Arg Ala Lys Pro
 85 90 95
 Lys Val Tyr Ile Ile Gln Ala Cys Arg Gly Glu Gln Arg Asp Pro Gly
 100 105 110
 Glu Thr Val Gly Gly Asp Glu Ile Val Met Val Ile Lys Asp Ser Pro
 115 120 125
 Gln Thr Ile Pro Thr Tyr Thr Asp Ala Leu His Val Tyr Ser Thr Val
 130 135 140
 Glu Gly Tyr Ile Ala Tyr Arg His Asp Gln Lys Gly Ser Cys Phe Ile
 145 150 155 160
 Gln Thr Leu Val Asp Val Phe Thr Lys Arg Lys Gly His Ile Leu Glu
 165 170 175
 Leu Leu Thr Glu Val Thr Arg Arg Met Ala Glu Ala Glu Leu Val Gln
 180 185 190
 Glu Gly Lys Ala Arg Lys Thr Asn Pro Glu Ile Gln Ser Thr Leu Arg

TC002AT "E0668650

195 200 205
 Lys Arg Leu Tyr Leu Gln
 210

<210> 10
 <211> 22
 <212> PRT
 <213> Mus musculus

<400> 10
 Met Ala Glu Asn Lys His Pro Asp Lys Pro Leu Lys Val Leu Glu Gln
 1 5 10 15

Leu Gly Lys Glu Val Leu
 20

<210> 11
 <211> 36
 <212> PRT
 <213> Mus musculus

<400> 11
 Thr Glu Tyr Leu Glu Lys Leu Val Gln Ser Asn Val Leu Lys Leu Lys
 1 5 10 15

Glu Glu Asp Lys Gln Lys Phe Asn Asn Ala Glu Arg Ser Asp Lys Arg
 20 25 30

Trp Val Phe Val
 35

<210> 12
 <211> 70
 <212> PRT
 <213> Mus musculus

<400> 12
 Asp Ala Met Lys Lys Lys His Ser Lys Val Gly Glu Met Leu Leu Gln
 1 5 10 15

Thr Phe Phe Ser Val Asp Pro Gly Ser His His Gly Glu Ala Asn Leu
 20 25 30

Glu Met Glu Glu Pro Glu Glu Ser Leu Asn Thr Leu Lys Leu Cys Ser
 35 40 45

Pro Glu Glu Phe Thr Arg Leu Cys Arg Glu Lys Thr Gln Glu Ile Tyr
 50 55 60

Pro Ile Lys Glu Ala Asn
 65 70

FOOAT "E0668660

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<400> 13
Gly Arg Thr Arg Lys Ala Leu Ile Ile Cys Asn Thr Glu Phe Lys His
   1                               10                          15

Leu Ser Leu Arg Tyr Gly Ala Asn Phe Asp Ile Ile Gly Met Lys Gly
    20                             25                         30

Leu Leu Glu Asp Leu Gly Tyr Asp Val Val Val Lys Glu Glu Leu Thr
    35                             40                         45

Ala Glu Gly Met Glu Ser Glu Met Asp Lys Phe Ala Ala Leu
    50                             55                         60
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<210> 14
<211> 94
<212> PRT
<213> Mus musculus

<400> 14
Ser Glu His Gln Thr Ser Asp Ser Thr Phe Leu Val Leu Met Ser His
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Gly Thr Leu His Gly Ile Cys Gly Thr Met His Ser Glu Lys Thr Pro
 20                25                30

Asp Val Leu Gln Tyr Asp Thr Ile Tyr Gln Ile Phe Asn Asn Cys His
 35                40                45

Cys Pro Gly Leu Arg Asp Lys Pro Lys Val Ile Ile Val Gln Ala Cys
 50                55                60

Arg Gly Gly Asn Ser Gly Glu Met Trp Ile Arg Glu Ser Ser Lys Pro
 65                70                75                80

Gln Leu Cys Arg Gly Val Asp Leu Pro Arg Asn Met Glu Ala
 85                90

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<210> 15
<211> 89
<212> PRT
<213> Mus musculus

<400> 15
Asp Ala Val Lys Leu Ser His Val Glu Lys Asp Phe Ile Ala Phe Tyr
 1             5             10             15

Ser Thr Thr Pro His His Leu Ser Tyr Arg Asp Lys Thr Gly Gly Ser
          20             25             30

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Tyr Phe Ile Thr Arg Leu Ile Ser Cys Phe Arg Lys His Ala Cys Ser
35 40 45

Cys His Leu Phe Asp Ile Phe Leu Lys Val Gln Gln Ser Phe Glu Lys
50 55 60

Ala Ser Ile His Ser Gln Met Pro Thr Ile Asp Arg Ala Thr Leu Thr
65 70 75 80

Arg Tyr Phe Tyr Leu Phe Pro Gly Asn
85

<210> 16

<211> 172

<212> PRT

<213> Mus musculus

<400> 16

Met Ala Ala Arg Arg Thr His Glu Arg Asp Pro Ile Tyr Lys Ile Lys
1 5 10 15

Gly Leu Ala Lys Asp Met Leu Asp Gly Val Phe Asp Asp Leu Val Glu
20 25 30

Lys Asn Val Leu Asn Gly Asp Glu Leu Leu Lys Ile Gly Glu Ser Ala
35 40 45

Ser Phe Ile Leu Asn Lys Ala Glu Asn Leu Val Glu Asn Phe Leu Glu
50 55 60

Lys Thr Asp Met Ala Gly Lys Ile Phe Ala Gly His Ile Ala Asn Ser
65 70 75 80

Gln Glu Gln Leu Ser Leu Gln Phe Ser Asn Asp Glu Asp Asp Gly Pro
85 90 95

Gln Lys Ile Cys Thr Pro Ser Ser Pro Ser Glu Ser Lys Arg Lys Val
100 105 110

Glu Asp Asp Glu Met Glu Val Asn Ala Gly Leu Ala His Glu Ser His
115 120 125

Leu Met Leu Thr Ala Pro His Gly Leu Gln Ser Ser Glu Val Gln Asp
130 135 140

Thr Leu Lys Leu Cys Pro Arg Asp Gln Phe Cys Lys Ile Lys Thr Glu
145 150 155 160

Arg Ala Lys Glu Ile Tyr Pro Val Met Glu Lys Glu
165 170

<210> 17

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<210> 20
<211> 90
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<210> 22

<211> 11
 <212> PRT
 <213> Mus musculus

<400> 22
 Lys Glu Asp Gly Thr Phe Pro Gly Leu Thr Gly
 1 5 10

<210> 23
 <211> 28
 <212> PRT
 <213> Mus musculus

<400> 23
 Thr Leu Lys Phe Cys Pro Leu Glu Lys Ala Gln Lys Leu Trp Lys Glu
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 Asn Pro Ser Glu Ile Tyr Pro Ile Met Asn Thr Thr
 20 25

<210> 24
 <211> 62
 <212> PRT
 <213> Mus musculus

<400> 24
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 1 5 10 15
 Leu Ser Pro Arg Val Gly Ala Gln Val Asp Leu Arg Glu Met Lys Leu
 20 25 30
 Leu Leu Glu Asp Leu Gly Tyr Thr Val Lys Val Lys Glu Asn Leu Thr
 35 40 45
 Ala Leu Glu Met Val Lys Glu Val Lys Glu Phe Ala Ala Cys
 50 55 60

<210> 25
 <211> 77
 <212> PRT
 <213> Mus musculus

<400> 25
 Pro Glu His Lys Thr Ser Asp Ser Thr Phe Leu Val Phe Met Ser His
 1 5 10 15
 Gly Ile Gln Glu Gly Ile Cys Gly Thr Thr Tyr Ser Asn Glu Val Ser
 20 25 30
 Asp Ile Leu Lys Val Asp Thr Ile Phe Gln Met Met Asn Thr Leu Lys
 35 40 45

FOOAT" E066660

Cys Pro Ser Leu Lys Asp Lys Pro Lys Val Ile Ile Ile Gln Ala Cys
 50 55 60

Arg Gly Glu Lys Gln Gly Val Val Leu Leu Lys Asp Ser
 65 70 75

<210> 26
 <211> 105
 <212> PRT
 <213> Mus musculus

<400> 26
 Val Arg Asp Ser Glu Glu Asp Phe Leu Thr Asp Ala Ile Phe Glu Asp
 1 5 10 15

Asp Gly Ile Lys Lys Ala His Ile Glu Lys Asp Phe Ile Ala Phe Cys
 20 25 30

Ser Ser Thr Pro Asp Asn Val Ser Trp Arg His Pro Val Arg Gly Ser
 35 40 45

Leu Phe Ile Glu Ser Leu Ile Lys His Met Lys Glu Tyr Ala Trp Ser
 50 55 60

Cys Asp Leu Glu Asp Ile Phe Arg Lys Val Arg Phe Ser Phe Glu Gln
 65 70 75 80

Pro Glu Phe Arg Leu Gln Met Pro Thr Ala Asp Arg Val Thr Leu Thr
 85 90 95

Lys Arg Phe Tyr Leu Phe Pro Gly His
 100 105

<210> 27
 <211> 58
 <212> PRT
 <213> Mus musculus

<400> 27
 Met Glu Asn Asn Lys Thr Ser Val Asp Ser Lys Ser Ile Asn Asn Phe
 1 5 10 15

Glu Val Lys Thr Ile His Gly Ser Lys Ser Val Asp Ser Gly Ile Tyr
 20 25 30

Leu Asp Ser Ser Tyr Lys Met Asp Tyr Pro Glu Met Gly Ile Cys Ile
 35 40 45

Ile Ile Asn Asn Lys Asn Phe His Lys Ser
 50 55

FOOAT "E066660

<400> 31
Glu Thr Asp Ser
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<210> 32
 <211> 7
 <212> PRT
 <213> Mus musculus

<400> 32
 Thr Asp Glu Glu Met Ala Cys
 1 5

<210> 33
 <211> 42
 <212> PRT
 <213> Mus musculus

<400> 33
 Gln Lys Ile Pro Val Glu Ala Asp Phe Leu Tyr Ala Tyr Ser Thr Ala
 1 5 10 15

Pro Gly Tyr Tyr Ser Trp Arg Asn Ser Lys Asp Gly Ser Trp Phe Ile
 20 25 30

Gln Ser Leu Cys Ser Met Leu Lys Leu Tyr
 35 40

<210> 34
 <211> 51
 <212> PRT
 <213> Mus musculus

<400> 34
 Ala His Lys Leu Glu Phe Met His Ile Leu Thr Arg Val Asn Arg Lys
 1 5 10 15

Val Ala Thr Glu Phe Glu Ser Phe Ser Leu Asp Ser Thr Phe His Ala
 20 25 30

Lys Lys Gln Ile Pro Cys Ile Val Ser Met Leu Thr Lys Glu Leu Tyr
 35 40 45

Phe Tyr His
 50

<210> 35
 <211> 81
 <212> PRT
 <213> Mus musculus

<400> 35
 Met Thr Asp Asp Gln Asp Cys Ala Ala Glu Leu Glu Lys Val Asp Ser
 1 5 10 15

Ser Ser Glu Asp Gly Val Asp Ala Lys Pro Asp Arg Ser Ser Ile Ile

FOOAT" E0668660

20 25 30
 Ser Ser Ile Leu Leu Lys Lys Lys Arg Asn Ala Ser Ala Gly Pro Val
 35 40 45
 Arg Thr Gly Arg Asp Arg Val Pro Thr Tyr Leu Tyr Arg Met Asp Phe
 50 55 60
 Gln Lys Met Gly Lys Cys Ile Ile Ile Asn Asn Lys Asn Phe Asp Lys
 65 70 75 80
 Ala

<210> 36
 <211> 47
 <212> PRT
 <213> Mus musculus

<400> 36
 Thr Gly Met Asp Val Arg Asn Gly Thr Asp Lys Asp Ala Gly Ala Leu
 1 5 10 15
 Phe Lys Cys Phe Gln Asn Leu Gly Phe Glu Val Thr Val His Asn Asp
 20 25 30
 Cys Ser Cys Ala Lys Met Gln Asp Leu Leu Arg Lys Ala Ser Glu
 35 40 45

<210> 37
 <211> 28
 <212> PRT
 <213> Mus musculus

<400> 37
 Glu Asp His Ser Asn Ser Ala Cys Phe Ala Cys Val Leu Leu Ser His
 1 5 10 15
 Gly Glu Glu Asp Leu Ile Tyr Gly Lys Asp Gly Val
 20 25

<210> 38
 <211> 39
 <212> PRT
 <213> Mus musculus

<400> 38
 Thr Pro Ile Lys Asp Leu Thr Ala His Phe Arg Gly Asp Arg Cys Lys
 1 5 10 15
 Thr Leu Leu Glu Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Arg Gly
 20 25 30

T00211"K066660

Thr Glu Leu Asp Asp Gly Ile
35

<210> 39
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<212> PRT
<213> Mus musculus

<400> 39
Gln Ala Asp Ser
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<210> 40
<211> 52
<212> PRT
<213> Mus musculus

<400> 40
Pro Ile Asn Asp Ile Asp Ala Asn Pro Arg Asn Lys Ile Pro Val Glu
1 5 10 15

Ala Asp Phe Leu Phe Ala Tyr Ser Thr Val Pro Gly Tyr Tyr Ser Trp
20 25 30

Arg Asn Pro Gly Lys Gly Ser Trp Phe Val Gln Ala Leu Cys Ser Ile
35 40 45

Leu Asn Glu His
50

<210> 41
<211> 51
<212> PRT
<213> Mus musculus

<400> 41
Gly Lys Asp Leu Glu Ile Met Gln Ile Leu Thr Arg Val Asn Asp Arg
1 5 10 15

Val Ala Arg His Phe Glu Ser Gln Ser Asp Asp Pro Arg Phe Asn Glu
20 25 30

Lys Lys Gln Ile Pro Cys Met Val Ser Met Leu Thr Lys Glu Leu Tyr
35 40 45

Phe Ser Arg
50

<210> 42
<211> 41

FOOAT" E066660

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<400> 45  
Ile Glu Ile Gln Thr Leu Thr Gly Leu Phe Lys Gly Asp Lys Cys Gln  
   1                               10                          15  
  
Ser Leu Val Gly Lys Pro Lys Ile Phe Ile Ile Gln Ala Cys Arg Gly  
          20                25                      30
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Ser Gln His Asp Val Pro Val Val Pro Leu Asp Met Val Asp His Gln
 35 40 45

Thr Asp Lys
 50

<210> 46
 <211> 52
 <212> PRT
 <213> Mus musculus

<400> 46
 Asn Val Thr Gln Val Asp Ala Ala Ser Val Tyr Thr Leu Pro Ala Gly
 1 5 10 15

Ala Asp Phe Leu Met Cys Tyr Ser Val Ala Glu Gly Tyr Tyr Ser His
 20 25 30

Arg Glu Thr Val Asn Gly Ser Trp Tyr Ile Gln Asp Leu Cys Glu Met
 35 40 45

Leu Ala Arg Tyr
 50

<210> 47
 <211> 55
 <212> PRT
 <213> Mus musculus

<400> 47
 Gly Ser Ser Leu Glu Phe Thr Glu Leu Leu Thr Leu Val Asn Arg Lys
 1 5 10 15

Val Ser Gln Arg Arg Val Asp Phe Cys Lys Asp Pro Asp Ala Ile Gly
 20 25 30

Lys Lys Gln Val Pro Cys Phe Ala Ser Met Leu Thr Lys Lys Leu His
 35 40 45

Phe Cys Pro Lys Pro Ser Lys
 50 55

<210> 48
 <211> 250
 <212> PRT
 <213> Mus musculus

<400> 48
 Met Asp Phe Gln Ser Cys Leu Asp Ala Ile Ala Glu Glu Leu Gly Ser
 1 5 10 15

Glu Asp Leu Ala Ala Leu Lys Phe Leu Cys Leu Asp Tyr Ile Pro His

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20 25 30
 Lys Lys Leu Glu Thr Ile Glu Asp Ala Gln Lys Leu Phe Leu Arg Leu
 35 40 .. 45
 Arg Glu Lys Gly Met Leu Glu Glu Gly Asn Leu Ser Phe Leu Lys Glu
 50 55 60
 Leu Leu Phe His Ile Ser Arg Trp Asp Leu Leu Val Asn Phe Leu Asp
 65 70 75 80
 Cys Asn Arg Glu Glu Met Val Arg Glu Leu Arg Asp Pro Arg Gln Cys
 85 90 95
 Pro Arg Phe Leu Pro Tyr Arg Ser Cys Ser Phe Arg Leu Ser Glu Glu
 100 105 110
 Val Ser Glu Leu Glu Leu Arg Ser Phe Lys Phe Leu Leu Asn Asn Glu
 115 120 125
 Ile Pro Lys Cys Lys Leu Glu Asp Asp Leu Ser Leu Leu Glu Ile Phe
 130 135 140
 Val Glu Met Glu Lys Arg Thr Met Leu Ala Glu Asn Asn Leu Glu Thr
 145 150 155 160
 Leu Lys Ser Ile Cys Asp Gln Val Asn Lys Ser Leu Leu Gly Lys Ile
 165 170 175
 Glu Asp Tyr Glu Arg Ser Ser Thr Glu Arg Arg Met Ser Leu Glu Gly
 180 185 190
 Arg Glu Glu Leu Pro Pro Ser Val Leu Asp Glu Met Ser Leu Lys Met
 195 200 205
 Ala Glu Leu Cys Asp Ser Pro Arg Glu Gln Asp Ser Glu Ser Arg Thr
 210 215 220
 Ser Asp Lys Val Tyr Gln Met Lys Asn Lys Pro Arg Gly Tyr Cys Leu
 225 230 235 240
 Ile Ile Asn Asn His Asp Phe Ser Lys Ala
 245 250
 .
 <210> 49
 <211> 54
 <212> PRT
 <213> Mus musculus
 .
 <400> 49
 Arg Glu Asp Ile Thr Gln Leu Arg Lys Met Lys Asp Arg Lys Gly Thr
 1 5 10 15
 Asp Cys Asp Lys Glu Ala Leu Ser Lys Thr Phe Lys Glu Leu His Phe

Thr Trp Tyr Ile Gln Ser Leu Cys Gln Ser Leu Arg Glu Arg Cys
35 40 45

<210> 53
 <211> 19
 <212> PRT
 <213> Mus musculus

<400> 53
 Pro Gln Gly Asp Asp Ile Leu Ser Ile Leu Thr Gly Val Asn Tyr Asp
 1 5 10 15
 Val Ser Asn

<210> 54
 <211> 22
 <212> PRT
 <213> Mus musculus

<400> 54
 Lys Asp Asp Arg Arg Asn Lys Gly Lys Gln Met Pro Gln Pro Thr Phe
 1 5 10 15
 Thr Leu Arg Lys Lys Leu
 20

<210> 55
 <211> 260
 <212> PRT
 <213> Mus musculus

<400> 55
 Met Ala Ala Pro Ser Gly Arg Ser Gln Ser Ser Leu His Arg Lys Gly
 1 5 10 15
 Leu Met Ala Ala Asp Arg Arg Ser Arg Ile Leu Ala Val Cys Gly Met
 20 25 30
 His Pro Asp His Gln Glu Thr Leu Lys Lys Asn Arg Val Val Leu Ala
 35 40 45
 Lys Gln Leu Leu Leu Ser Glu Leu Leu Glu His Leu Leu Glu Lys Asp
 50 55 60
 Ile Ile Thr Leu Glu Met Arg Glu Leu Ile Gln Ala Lys Gly Gly Ser
 65 70 75 80
 Phe Ser Gln Asn Val Glu Leu Leu Asn Leu Leu Pro Lys Arg Gly Pro
 85 90 95
 Gln Ala Phe Asp Ala Phe Cys Glu Ala Leu Arg Glu Thr Arg Gln Gly
 100 105 110

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His Leu Glu Asp Leu Leu Leu Thr Thr Leu Ser Asp Ile Gln His Val
115 120 125

Leu Pro Pro Leu Ser Cys Asp Tyr Asp Thr Ser Leu Pro Phe Ser Val
130 135 140

Cys Glu Ser Cys Pro Pro His Lys Gln Leu Arg Leu Ser Thr Asp Ala
145 150 155 160

Thr Glu His Ser Leu Asp Asn Gly Asp Gly Pro Pro Cys Leu Leu Val
165 170 175

Lys Pro Cys Thr Pro Glu Phe Tyr Gln Ala His Tyr Gln Leu Ala Tyr
180 185 190

Arg Leu Gln Ser Gln Pro Arg Gly Leu Ala Leu Val Leu Ser Asn Val
195 200 205

His Phe Thr Gly Glu Lys Asp Leu Glu Phe Arg Ser Gly Gly Asp Val
210 215 220

Asp His Thr Thr Leu Val Thr Leu Phe Lys Leu Leu Gly Tyr Asn Val
225 230 235 240

His Val Leu His Asp Gln Thr Ala Gln Glu Met Gln Glu Lys Leu Gln
245 250 255

Asn Phe Ala Gln
260

<210> 56
<211> 11
<212> PRT
<213> Mus musculus

<400> 56
Leu Pro Ala His Arg Val Thr Asp Ser Val Cys
1 5 10

<210> 57
<211> 18
<212> PRT
<213> Mus musculus

<400> 57
Val Ala Leu Leu Ser His Gly Val Glu Gly Gly Ile Tyr Gly Val Asp
1 5 10 15

Gly Lys

<210> 58

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<211> 56
 <212> PRT
 <213> Mus musculus

<400> 58
 Leu Leu Gln Leu Gln Glu Val Phe Arg Leu Phe Asp Asn Ala Asn Cys
 1 5 10 15
 Pro Ser Leu Gln Asn Lys Pro Lys Met Phe Phe Ile Gln Ala Cys Arg
 20 25 30
 Gly Asp Glu Thr Asp Arg Gly Val Asp Gln Gln Asp Gly Lys Asn His
 35 40 45
 Thr Gln Ser Pro Gly Cys Glu Glu
 50 55

<210> 59
 <211> 53
 <212> PRT
 <213> Mus musculus

<400> 59
 Ser Asp Ala Gly Lys Glu Glu Leu Met Lys Met Arg Leu Pro Thr Arg
 1 5 10 15
 Ser Asp Met Ile Cys Gly Tyr Ala Cys Leu Lys Gly Asn Ala Ala Met
 20 25 30
 Arg Asn Thr Lys Arg Gly Ser Trp Tyr Ile Glu Ala Leu Thr Gln Val
 35 40 45
 Phe Ser Glu Arg Ala
 50

<210> 60
 <211> 18
 <212> PRT
 <213> Mus musculus

<400> 60
 Asp Met His Val Ala Asp Met Leu Val Lys Val Asn Ala Leu Ile Lys
 1 5 10 15
 Glu Arg

<210> 61
 <211> 35
 <212> PRT
 <213> Mus musculus

<400> 61

Glu Gly Tyr Ala Pro Gly Thr Glu Phe His Arg Cys Lys Glu Met Ser
 1 5 10 15

Glu Tyr Cys Ser Thr Leu Cys Gln Gln Leu Tyr Leu Phe Pro Gly Tyr
 20 25 30

Pro Pro Thr
 35

<210> 62

<211> 31

<212> PRT

<213> Mus musculus

<400> 62

Met Glu Ser Glu Met Ser Asp Pro Gln Pro Leu Gln Glu Glu Arg Tyr
 1 5 10 15

Asp Met Ser Gly Ala Arg Leu Ala Leu Thr Leu Cys Val Thr Lys
 20 25 30

<210> 63

<211> 74

<212> PRT

<213> Mus musculus

<400> 63

Ala Arg Glu Gly Ser Glu Val Asp Met Glu Ala Leu Glu Arg Met Phe
 1 5 10 15

Arg Tyr Leu Lys Phe Glu Ser Thr Met Lys Arg Asp Pro Thr Ala Gln
 20 25 30

Gln Phe Leu Glu Glu Leu Asp Glu Phe Gln Gln Thr Ile Asp Asn Trp
 35 40 45

Glu Glu Pro Val Ser Cys Ala Phe Val Val Leu Met Ala His Gly Glu
 50 55 60

Glu Gly Leu Leu Lys Gly Glu Asp Glu Lys
 65 70

<210> 64

<211> 56

<212> PRT

<213> Mus musculus

<400> 64

Met Val Arg Leu Glu Asp Leu Phe Glu Val Leu Asn Asn Lys Asn Cys
 1 5 10 15

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<400> 68

Gln

21

19

21

19

<220>

<223> Primer derived from human caspase-14 cDNA

<400> 73

atcttctccc ttgaggaag

19

<210> 74

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer derived from human caspase-14 cDNA

<400> 74

atatgatatg tcaggtgccc g

21

<210> 75

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer derived from human caspase-14 cDNA

<400> 75

caaggtgtac atcatacagg

20

<210> 76

<211> 850

<212> DNA

<213> Mus musculus

<220>

<221> modified_base

<222> (537)

<223> Where n is Adenine, Cytosine, Guanin or Thymidine

<400> 76

gtgcgagggc ggggtgcgcag gccactctgt ctccggtttg tttccacgac tttcggtctg 60
 tacctcagtc tctactcact aggagtcggt aacgtcctcc tttctatact atacagtcca 120
 cgggcggacc gggactgcga cacacagtgg tttcggggccc tcccaaggct ccatctgtac 180
 ctccgggacc ttgcgtacaa ggcaatggac tttaaacttt cgtggtactt ctccctaggg 240
 tggcgggtcg ttaaagacct tctcaacctt cttaaagtcg tctggtatct attaacctt 300
 ctcgacagtc cgacacggaa acaccatgag taccgtgtac cactccttcc ggaggagttc 360
 cctcttctac tcttctacca gtctgatctt ctggaaaaac ttcagaactt gttgttcttg 420
 acgttccggg actctccgtt cggtttccac atgtagtagg tccgaacatc tcctctcgtg 480
 tctctggggc cactccttga tgcaccttta ctcttgatc cactctact ccttgancca 540
 cctctactcc aacgacacga gttcttgttg ggggtttcat agggttggat atgcctatgg 600
 gaggtgtaga tgaggtgcca tctcccatg gagaggatat ctgtactgct ctttccgaga 660
 ccgaagtagg tctgggactg cctacacaag taagtatttt ttcctaggta gaatcttgac 720
 tgtcttctct agtgggctga ataccgtttg tgccctccact acgtccttcc ttttggttcc 780
 tttcacttgg gacttcaggt ttcgtgggag gccttcttcg agataaacgt tattttctct 840
 cccgtcccta 850

<210> 77

<211> 16
 <212> PRT
 <213> Mus musculus

<400> 77
 His Ala Ser Ala His Ala Ser Gly Glu Thr Glu Ala Lys Gln Arg Cys
 1 5 10 15

<210> 78
 <211> 5
 <212> PRT
 <213> Mus musculus

<400> 78
 Lys Arg Gly Gln Gly
 1 5

FOOAT EOESEEO